

SPECIAL CONTRIBUTIONS

Racial and Ethnic Disparities in Health: An Emergency Medicine Perspective

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Abstract

Significant disparities exist in health care based on race. Even when controlling for socioeconomic factors, minorities still have lower rates of utilization for certain procedures, higher mortality rates, and differences in usual source of care. There are a multitude of causes for these disparities, including differences based on access to care, the patient–doctor relationship, and insurance status. This article addresses possible

factors that account for persistent disparities in health based on race and suggests approaches to remedying these disparities. Although many studies have been done on this topic, further research is needed to examine factors specifically in the emergency department setting. **Key words:** disparities; race; socioeconomic factors; insurance status. ACADEMIC EMERGENCY MEDICINE 2003; 10:1289–1293.

Despite changes in medical technology and the resultant health care advances, minorities have continued to suffer from excess mortality for a number of common health conditions. Many of the disparities in medical care have directly impacted the emergency department (ED), which often is perceived as the safety net of health care, functioning as the sole provider for the uninsured, the poorly insured, and those who find it difficult to navigate the primary care system. As a result, the ED provides care for a significant number of minorities who represent a disproportionate share of these patients. Because of this role, it is important that we recognize where key disparities exist in access to care, as well as overall outcomes. The objective of this article is to review existing research on disparities in the area of emergency medicine, discuss general causes that may account for such disparities, and propose strategies for change and areas where future research is needed.

To help combat racial disparities in medicine, the Surgeon General first developed the Healthy People 2000 initiatives in 1979, and later the Healthy People 2010 initiatives with the key goal to reduce disparities in health.¹ The Department of Health and Human Services has identified key areas to target for the reduction of racial disparities such as cardiovascular disease, diabetes, immunizations, infant mortality, human immunodeficiency virus (HIV), and cancer.²

Although the government has begun to focus greater attention on these disparities as an important research priority, significant gaps continue to exist. In 1998, the average life expectancy for African American males was 7 years less than that of white males, and for African American females, it was >5 years less than that of white females.³ As the recent Institute of Medicine report “Unequal Treatment” demonstrated, there are still several areas in which excess mortality/morbidity exist despite adjustments for socioeconomic status for both nonpreventable as well as preventable causes of death.⁴ Although there has been some research performed on racial disparities, there is still a significant need for additional studies in this area. In particular, there has been very little done specifically focusing on emergency care.

WHAT FACTORS PLAY A ROLE IN RACIAL DISPARITIES IN EMERGENCY MEDICINE?

Poverty and Access to Care. Poverty and access to care are obvious predisposing factors to poor health outcomes of patients who present to the ED. The problem of access is most dramatic for poor, uninsured patients of whom minorities comprise a disproportionate share; poverty rates among African Americans, Hispanics, and Native Americans are more than twice that of whites.⁵ Patients without insurance are significantly more likely to suffer difficulties in obtaining a usual source of care than similar patients with insurance, regardless of race. Much of this difference is secondary to cost barriers.⁶ When the interface with the health care system does occur, it tends to occur in areas where continuity of care is not emphasized, such as in the setting of EDs, as well as community health centers.⁷

Lack of access to adequate primary care may lead to greater disease severity upon presentation to the ED,

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and therefore may account to some extent for higher rates of mortality and morbidity in minorities. This is particularly true for those diseases for which proper outpatient management can reduce ED visits (such as asthma, congestive heart failure, and diabetes). Without such management, patients may present with higher levels of acuity than if care had otherwise been obtained. Although insurance is an independent factor related to increased rates of such “ambulatory care-sensitive” visits, race also has been shown to play a role even when controlling for severity of disease.⁸

Many of these barriers to care exist among the poor and uninsured regardless of race.⁹ Studies have shown that among minorities, however, other factors exist beyond poverty and access that can further contribute to such disparities in care.⁴

Insurance-level Differences. Even with insurance coverage through such programs as Medicaid and Medicare, minorities have been shown to have higher utilization of services in more acute care venues such as the ED and inpatient facilities.^{10,11} One explanation could be that despite adequate coverage, minority patients still present later for diseases at a point when complications are higher, resulting in the need for more emergent care. For example, Gornick and colleagues found that despite lower rates of other preventive care measures and interventional procedures such as angioplasty, African American Medicare recipients have significantly higher rates of limb amputations. Such differences persisted even when controlling for income. This is a procedure directly linked to complications from diabetes; however, the rates reported in the Gornick study far exceeded the differentials in diabetes prevalence between African Americans and whites, suggesting deficiencies in control and preventive care for this disease.¹⁰

Another possible explanation for these racial discrepancies may result from the differential rates of coinsurance, particularly for those patients with Medicare. Because many procedures and medications require out-of-pocket contributions by Medicare beneficiaries, it is understandable that such costs would disproportionately affect those patients who may be poor and therefore still unable to afford copays. Nine percent of white Medicare beneficiaries lack supplemental insurance, versus 27% of African Americans and 16% of Hispanics.¹² This is particularly important given the fact that lower rates of coinsurance in the elder population have been linked with higher rates of complications, including revisits and mortality, after discharge from the ED.¹³

Minority Medicaid beneficiaries also may be more likely to reside in areas where physician supply is lower, which may disproportionately contribute to lower levels of preventive care and higher rates of ED use. Many inner-city communities may have lower

access to specialists and hospital resources.¹⁴ In addition, there may be differences in Medicaid benefits in states with higher proportions of minority program beneficiaries. African Americans, for example, are more likely than whites to live in states with lower overall Medicaid benefits, such as those in the South.⁷

Differences also have been demonstrated in private insurance and managed care populations. Many studies have not specifically been performed in the ED but still have shown results that are particularly relevant to the field. White–African American differences in angiography, coronary artery bypass surgery, and angioplasty have been shown to persist even when controlling for insurance coverage and comorbid conditions, suggesting that there are other factors that contribute to disparities in access beyond economic factors. A review by Sheifer and colleagues examining past studies of intervention for cardiac disease showed consistently lower procedure rates for African Americans as well as women.¹⁵

Differences in Delivery of Care. Although differences in primary care access, disease severity, and coverage may explain overall differences in poor health outcomes, it does not completely address disparities that persist once minority patients actually present within the health care system. Many of the studies that have addressed disparities in care in the ED setting reflect differences in delivery of care that persist even in the face of similar levels of disease severity. Recent data showed that nonwhites with acute cardiac ischemia were two times more likely to be sent home from the ED, and nonwhites with myocardial infarctions were over four times more likely to be missed.¹⁶

There also have been studies that suggest significant disparities in the administration of pain medication in the ED. Todd and colleagues studied the effect of ethnicity on the administration of pain medication in patients with long-bone extremity fractures, finding that 55% of Hispanic patients, as compared with 26% of non-Hispanic white patients, failed to receive appropriate analgesics.¹⁷ These disparities persist despite the fact that there has been no demonstrable difference in physician ability to assess pain severity in these groups.¹⁸ Todd et al. used the same design to compare analgesic administration in African American and white patients. They found that African American patients also were significantly less likely than white patients to receive ED analgesics.¹⁹

Physician Characteristics and Factors within the Patient–Doctor Relationship. Racial bias is an important factor that must be considered in explaining disparities, particularly in regard to delivery of care. This is a difficult topic not only because it is a politically sensitive issue, but also because it is often hard to evaluate as well as document.²⁰ Despite this, it

is an issue that should be discussed in any discourse addressing the issue of racial and ethnic disparities in health, because it is such a pervasive issue in American culture.

There has been some evidence that physician bias may play a role in differences in delivery of care as demonstrated in a study by Schulman and colleagues. In this study, physicians were presented with actors with identical chest pain case scenarios differing only by race and sex. The study found that physicians were less likely to refer African Americans and women for cardiac catheterization as compared with whites.²¹

Less information is available about how physician race affects care. Minorities have been shown to have higher satisfaction rates when they are in racially concordant patient–doctor relationships, which could indirectly increase utilization. Although the link of satisfaction and utilization has not been investigated extensively, there is some evidence that patients who are less satisfied with their care are less likely to be compliant with treatment plans.²² Saha and colleagues, using data from the Commonwealth Fund, found that African Americans were significantly more likely than whites to report higher levels of satisfaction when physicians were of the same racial background. Specifically, African Americans reported that same-race doctors tended to treat them with respect and provide higher levels of preventive care.²³ In managed care organizations this relationship stands as well.²⁴

The role of the minority physician in the care of diverse populations is indeed substantial. In a recent study of California physicians, it was found that African American and Hispanic physicians were more likely to care for minority patients and those who were uninsured or covered by Medicaid.²⁵ Just as minority physicians have a higher propensity to practice in minority communities, minority patients tend to go to minority doctors as well.²⁶ The relationship of race to physician use persists even when controlling for socioeconomic factors.²⁷ Given lower supplies of physicians in minority communities and the higher propensities for minorities to work in these areas, there is evidence that efforts to increase minority medical student matriculation may help decrease racial and ethnic disparities in health by improving access to care through raising physician supply. This is important particularly for the area of emergency medicine, for which the applicant pool for residency slots has been reported to be significantly less than that needed to be representative of the general population.²⁸

WHAT CAN WE DO TO TARGET RACIAL DISPARITIES?

Addressing racial disparities in health care is a complicated issue requiring a multifaceted approach.

Given the many factors that contribute to these disparities, reducing gaps in access to care is one obvious solution. Other approaches involve encouraging cultural competency within the medical system to ensure that providers have a better understanding of the specific health needs of minority communities. It has been suggested that such competency may be the key mechanism to changing health care outcomes of minority Americans.^{29,30}

The discussion of these concepts and strategies in detail is beyond the scope of this article. However, there are several categories that have applicability for the practice of emergency medicine in academic and community settings. Such strategies include the provision of trained interpreter services, which have been shown to increase patient satisfaction and reduce medical errors in the ED and other settings.^{31–34} In addition, recruitment and retention of minority staff are important elements for fostering a more comfortable environment to reflect the needs of minority communities, particularly given data showing the role of racial concordance in the clinical encounter. Finally, the patient–doctor interaction can be enhanced through the inclusion of family and/or community members, including nontraditional caregivers.³⁵

FUTURE RESEARCH

There is still a great deal of research needed in the area of racial disparities and health. This is particularly true in the field of emergency medicine for which this is a largely underdeveloped area.

Whereas it is recognized that disparities exist for a diverse representation of minority groups, most of the research has been limited to African Americans and often either does not focus on patients from other races and ethnicities, or only analyzes separate ethnicities as part of a larger collective group. This may be a result of the fact that these groups are difficult to identify or are underrepresented in existing datasets. Researchers must make greater efforts to identify and target certain subpopulations in the future, such as Native Americans, for whom few data are available. We also must recognize that differences exist within Hispanic and Asian populations based on ethnicity and length of residence in the United States.

In addition to improving the quality of data available to evaluate specific racial groups in more detail, it is important to study a broader spectrum of outcomes. The limited amount of research that has occurred in ED care has mainly focused on access and care delivery. Future research must expand evaluation to also include other quality indicators such as patient satisfaction, follow-up, and compliance with care.

Finally, research must extend beyond observational to interventional. It is not only critical to recognize that disparities exist, but also to investigate what strategies work best to reduce them. Certain inter-

ventions and practice styles may be more likely to result in better outcomes for specific minority populations.

Fortunately, there has been growing focus in recent years on racial disparities in medicine as an important priority area for funding, particularly following a presidential initiative announced in 1998 to eliminate racial and ethnic disparities.² In recent years, several government agencies such as the Centers for Disease Control and Prevention, the Center for Medicaid and Medicare Services (formerly the Health Care Financing Administration), the Agency for Healthcare Research and Quality, and the National Institutes of Health have funded initiatives targeting racial disparities in health.

CONCLUSIONS

Many factors contribute to racial disparities in health, including poverty, access to care, insurance coverage, and more difficult-to-measure factors such as physician racial bias. There is still a great deal of research that must be performed in this area, specifically in emergency medicine, where many patients often receive care that would otherwise be inaccessible. Given the significant need in this area, there are ample opportunities for future research.

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